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Joseph M. Rolnicki

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Reg. No. 32,653

In re application of: Menke, W. Kenneth :

Serial No.: 10/624,271

Examiner: Neils, Peggy A.

Filed: July 21, 2003

Group Art Unit: 2875

For: LOW PROFILE EMERGENCY
VEHICLE LIGHT BAR

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR § 1.131

We, W. Kenneth Menke and W. Kenneth Menke III, are joint inventors of the claimed inventions of the subject patent application and do hereby declare and state that:

By at least December 19, 2002, we reduced to practice a light bar for a vehicle as shown and described in the above-referenced patent application. Our efforts to this effect are documented in Exhibit A submitted herewith, which is a copy of an invention

disclosure we provided to our patent attorney and which was used in the preparation of this patent application.

In pertinent part, Exhibit A demonstrates the development of the low profile emergency vehicle light bar that is the subject of the above-referenced patent application.

Exhibit A identifies the invention of the low profile emergency vehicle light bar defined by Claims 1-20 currently pending in the application prior to the filing date of the U.S. patent of Dalton, Jr., et al. No. 7,036,965. For example, the copies of the photographs P5, P6, P7, P9, P10, P11, and P12 of Exhibit A disclose the elongate support, the plurality of light assemblies, and at least one mounting bracket of the invention recited in the independent claims 1, 9, 12, and 16. The copy of the photograph P7 of Exhibit A discloses the mounting bracket supporting the plurality of light assemblies in a curved configuration in front of the top edge of either the front-facing or rear-facing windows of a vehicle as recited in dependent claims 2, 3, 4, 10, 11, and 17. The copies of photographs P9 and P10 disclose the mounting bracket being connectable to either a front-facing or rear-facing window by adhesives as recited in claims 5, 18, and 19. The copies of photographs P5, P6, P7, P17, and P18 disclose the light bar support having opposite front and rear surfaces with the rear surface opposing the top edge of either the front-facing or rear-facing vehicle window and the plurality of light assemblies being connected only to the front surface of the support as recited in claims 6, 15, and 20. The copies of photographs P11, P12, P14, and P15 disclose the plurality of separate cases mounted to the light bar support and each light assembly of the plurality of light assemblies being mounted in one case of a plurality of cases as

recited in claims 7 and 13. The copies of photographs P11 and P12 disclose the light bar support being flexible along its length as recited in claim 8, and the plurality of cases being movable relative to each other in response to the support bending in the curved configuration as recited in claim 14.

Pages 2-6 of Exhibit A further identify the invention of the low profile emergency vehicle light bar defined by claims 1-20 prior to the filing date of the Dalton, Jr. et al. patent number 7,036,965.

Further declarants saith not.

The undersigned being hereby warned that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 USC § 1001, and that such willful false statements and the like may jeopardize the validity of the application and any patents issuing therefrom, declare that they are properly authorized to execute this declaration, and that all statements made of their knowledge are true and that all statements made on information and belief are believed to be true.

W. Kenneth Menke
W. Kenneth Menke

March 15, 2007
Date

W. Kenneth Menke, III
W. Kenneth Menke, III
3/15/07
Date

PowerArc®

Warning Lights

To: Joe Rolnicki
Thompson Coburn

From: Ken Menke, Coinventor
Ken Menke III, Coinventor

Date: December 19, 2002

Subject: Patent Search

Enclosed is a description and photos of a new and novel casework for use on emergency vehicles, especially automobiles used by police officers and other emergency vehicles desiring a stealth appearance when the warning lights are not in use. During the performance of many police functions, particularly traffic law enforcement, it is advantageous to use a vehicle that appears to be an ordinary vehicle when the warning lights are turned off but becomes instantly recognizable as an emergency vehicle when the warning lights are energized.

Also enclosed are several patents which are somewhat related to our invention. Please have a search performed to see if there are any other relevant patents.

I. Background and History

For many years, stealth appearance was accomplished using a small, magnetic mount, rotating beacon operated from the cigar lighter outlet. Commonly called "Kojak" lights. the warning light was kept on the seat until needed. When needed, the light was plugged into the cigar lighter outlet and placed either on the roof or dashboard. Never very effective, the practice has virtually disappeared because:

The dash and roof are now probably made of a non-magnetic material.

The optical energy on the device provides only a tiny fraction of that required by current national standards such as SAE J2498, Minimum Performance of the Warning Light System Used on Emergency Vehicles and NFPA 1901, Standard for Automotive Fire Apparatus, small vehicles.

At this time, the most popular approach to installing warning lights on so called "clean" or "slick roof" vehicles is to install multiple small warning devices on the inside of the windshield and rear window, or dash and rear package deck along with small strobe lights inserted into the turn signals, stop tail and turn lights, and back up lights. (See Illustrations A-1 to A-7)



The Fire Products Company

62 Lincoln Street, Webster Groves, Missouri 63119-234¹

Tel. 314-968-1115 Fax 314-961-8893

www.PowerArcLights.com

While better than a single 35w Kojak light, these new systems seldom comply with the requirements of the current national standards and the systems are extremely expensive to install and then remove when the car is decommissioned and sold. From a performance standpoint, there are a number of problems with this approach:

1. Virtually all of the light energy is directed toward the front and rear of the vehicle and little or no protection is provided to the sides or corners to provide protection when entering intersections.
2. Because the highest performance lights are on the inside of the vehicle and the light must pass through tinted glass windows, a substantial amount of light is lost. Unless the devices are sealed to the glass, additional light may be lost and reflected back in to the vehicle and into the eyes of the driver.
3. As can be seen in the attached illustrations (B1-B2) of police car interiors, virtually every square inch is already used to mount radar units, video cameras, and control consoles. Interior mounting of warning lights only adds to the clutter.

Ideally, the warning light system would have all of the warning lights on the outside of the vehicle and the lights would be virtually invisible when viewed at a distance of more than 50 or 100 feet. The system would also be inexpensive, as well as easy to install, service, and remove without any significant damage to the vehicle.

II. The Invention

We have developed a miniature light bar approximately 2" tall and 3" in depth and about 45 inches in length. As can be seen from the enclosed photos (P1 to P7), light bars constructed per the invention are very hard to see even when close enough to read the license plate. To provide a comparison, the car shown has both a conventional lightbar and a lightbar incorporating the concepts to be searched.

- P1 shows the car front from about 100 feet.
- P2 shows the car front from about 50 feet.
- P3 shows the car front from about 25 feet.
- P4 shows the left corner of the car from about 20 feet.
- P5 shows the right corner of the car from about 10 feet.
- P6 shows the left side of the car from about 15 feet.
- P7 shows the left corner of the car from about 10 feet.

We have been actively developing the concepts incorporated in this new lightbar since early 2000 but until the commercial availability of very high performance LED's and miniature prefocused halogen lamps such as the MR-11 and MR-16, the required lightbar structures needed to be rather large and were more conspicuous than desirable.

With the advent of these high performance, miniature light sources with optics in the range of one to two inches in diameter, very small structures are now possible that project enough energy to exceed the requirements of all of the current national standards for warning lights.

All of the optical elements are contained within individual, small "U" shaped cases with a plastic front lens. Each of these individual cases is mounted on a thin metallic strip and this assembly is attached to the vehicle via brackets attached to the top portion of the windshield and rear window using high performance double faced tape or other adhesive.

P-8 shows one case mounted to the back strip in the center of the strip. The typical lightbar will have a total of five such cases, two on either side of the center case.

A key concept in this invention is the mounting of the light bars to the front and rear window glass using an adhesive or double faced adhesive tape that is permanent but which can be broken using a thin, sharp blade such as a putty knife when is desired to remove the bar. After removal of the bracket from the glass, any remaining tape or adhesive can be removed by scraping and/or the use of a solvent.

P-9 shows a pair of brackets attached to the front windshield.

P-10 shows a closeup of a bracket in place.

Installation and removal are simple and do no damage to the vehicle. While only two brackets are shown, we anticipate the use of three to five brackets to provide a strong enough connection to withstand the stresses in applied to the lightbar when traversing a tunnel type car wash.

The lightbar is mounted at an elevation that keeps the structure total within outline of the vehicle. Typically, the light bar will be at the intersection of the glass and the roof. The top, rear, and possibly bottom surfaces, inside and outside, of the case will be flat black, possibly textured, to virtually eliminate any coherent, reflected light.

To make the mounting structure virtually invisible, it is also desirable that the channel approximately conform to the curve of the intersection of the roof and glass. A key part of this invention is the use of a flexible support structure. Although manufactured and shipped as a straight unit, the frame is intended to be formed by the installer to match the curve of the roof/glass interface. As can be seen in the photos, virtually any automobile roof/glass shape may be matched by simply bending the structure by hand to match.

Photo 11 shows the curve to fit the front window.
Photo 12 shows the curve to fit the rear window.

Within each case, a number of individual optical devices can be mounted. Each case (bar segment) consists of a clear or colored lens, along with a substructure to carry the optical element, and a gasket that seals the case to the backplate and fasteners that permit the case to be removed from the back strip for lamp replacement or other servicing.

We currently believe that in the optimum design, the case will consist of a transparent plastic molding that forms the front and bottom of the case with a metallic cover bonded to the plastic molding to form the top of the case. This entire assembly is removeably attached to the strip that forms the back of the case.

The individual optical elements are attached to a subplate which is in turn mounted to the bottom of the plastic molding. To service the optical elements in one of the cases, the case is detached from the bendable back structure and the power and ground connections broken. The front portion of the case can then be serviced at a convenient location. The subplate carrying the optical elements is secured to the case by fasteners through the bottom of the case. Removal of the subplate permits easy servicing of all the optical elements.

P-13 shows a typical optical element of the type flashed by rotation.

P-14 shows the element and the case into which it fits. The top of the case is metal and opaque. The front and bottom are plastic.

P-15 shows the element in place in the case.

P-16 shows the case with the element in the case and mounted on the back strip. The fasteners connecting the case to the back strip and the subplate to the case bottom are not shown. The bottom of the sub plate is visible through the plastic bottom.

Fleet operators may wish to maintain an inventory of spare cases complete with the optical elements and simply replace

the case requiring service with one that is functional. In this way the vehicle can be immediately returned to service.

Each optical device houses one or more optical elements which may be stationary and steady burning, stationary and flashing, or rotatable and flashed by motion. Each optical element is positioned in the optical device to project the required amount of light into a specific area to order to comply with the various national standards.

It is important to understand that the orientation of the individual optical elements is determined by the shape of the installed frame. Although built and shipped as a straight unit, the individual elements must be oriented to correctly project light when the channel is actually mounted on the vehicle. Thus the front and rear devices for a specific model will probably be different and a system designed for a Ford will differ from that designed for a Chevrolet.

P-17 shows the top of the straight lightbar as it is built and shipped next to the bendable strip that forms the back of the case.

P-18 shows the front of the straight lightbar as it is built and shipped next to the bendable strip that forms the back of the case.

Fortunately, virtually every American police department uses the full size car built by Ford (Crown Victoria) or Chevrolet (Caprice). In excess of 90% of all police vehicles can be equipped with one of two standard, factory supplied, optical element orientations. The installer needs only to form the bar to conform to the vehicle on which the bar is installed. If equipping a Ford Crown Victoria, the Crown Victoria front and rear bars are ordered and installed. If doing a Chevrolet Caprice, the Caprice package is ordered and installed.

For less common vehicles and for reinstallation after model changes, each optical element can be easily field adjusted to achieve the required performance. An important feature of this design is that individual optical elements can be adjusted from the outside with the light bar installed on a vehicle. For each individual optical element, a means is provided to rotate the element and then to secure the element in the desired orientation.

To do this, one fastener will be permanently attached to the subplate with the exposed head protruding through the bottom of the case. The fastener will have an "O" ring between the case and underside of the head to prevent entry of water. A second fastener will similarly project through the bottom of the case but will be arranged to lock the subplate into the

selected orientation.

III. Other Patents

A. In Patent 5,988,839 (enclosed) held by Whelan Engineering, the undesirable consequences of a roof mounted light bar are discussed. This patent addresses ways to provide adequate protection to the rear but suggests that forward protection be accomplished by a variety of small devices mounted inside on the dash board etc.

Although perhaps less obvious than a roof mounted lightbar when viewed from the rear, the structure described in the Whelan patent is very large and far more visible than that of our invention.

For several years, Whelen has offered a product based on this invention along with a similar device for mounting to face the front of the vehicle. There has been essentially no market acceptance of the package. In addition to being very expensive, the product suffers from the fact it is:

1. Extremely vehicle specific. Every make, model and year requires a specific design. Only a product for Ford Crown Victorias has ever been offered.

2. The product must be painted to match the color of the vehicle.

It appears to me that there is only one independent claim in this patent. The essence of this claim is that the housing generally forms a continuous downstream extension of the roof, is smooth a continuous, and the concavity increases in depth from the top leading edge to the top trailing ledge.

When mounted as shown, our invention does not form a continuous extension of the rear of the roof (especially when mounted on the front!). It is discontinuous when formed to fit the form of the curve at the glass/roof interface, and our concavity is of constant depth from the front to the back.

As mentioned previously, we have enclosed copies of a number of lightbar patents but do not think any of them are particularly relevant to the concepts of this invention described herein.

I look forward to your thoughts. Please begin a patent search. Best regards.

WARNING LIGHTS

Galls guarantees a huge selection and the latest technology.

We offer a wide variety of LED and halogen warning light packages. Our economy 911EP model includes all the features of the top-of-the-line products at a reasonable price.

Product Features:

We offer a wide variety of options for individual customization. Every piece is pre-tested by our trained technicians to guarantee that it arrives ready to perform for you! Our huge in-stock inventories ensure fast delivery.

Look for the Galls

GALLS

Vehicle

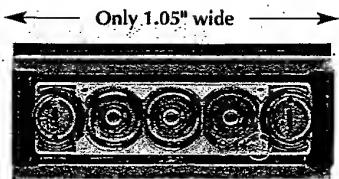
Coastal

Signal Vehicle Products GM

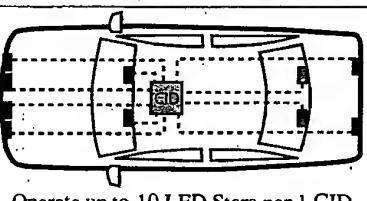
Federal Signal

OTI-EP

LED Warning Systems



NEW Remote LED Light Heads



Operate up to 10 LED Stars per 1 CID

LED lighting is longer lasting than strobe or halogen with an approximate life of 100,000 hours. These lights have limitless applications, and can be mounted almost anywhere due to their small size. They have a very small footprint and can be grouped to provide completely customizable warning light packages. Their discreet size creates a "stealthy" appearance in the off mode. LED Stars can be synchronized as a system to increase effective warning power. They can be mounted in the interior or exterior of the vehicle, and can be utilized with existing warning systems to increase overall effectiveness. Wide angle light dispersion. Ample wiring package allows for flexible placement and positioning of lights on or in the vehicle. Use up to 10 LED lights with single CID controller (sold separately below). 1.12"H x 1.05"W x 2.75"D. Available in ■■ red/red, ■■ amber/amber, ■■ blue/blue, ■■ red/blue. Specify color.

| Item | Description | Price |
|----------|--|----------|
| #K-DL004 | Pair of Led Stars (Red/Red, Amber/Amber) | \$149.99 |
| #K-DL004 | Pair of Led Stars (Red/Blue) | \$159.99 |
| #K-DL004 | Pair of Led Stars (Blue/Blue) | \$174.99 |
| #K-DL003 | CID (Central Interface Device) | \$105.99 |



WHELEN

Hide-A-Way Strobes

Increase the warning of your unmarked or patrol vehicle with a set of these hi-intensity strobes. They provide brilliant warning power, yet they do not alter vehicle's look. Perfect for undercover vehicles, these lights can be easily hidden in existing auxiliary lights. They require drilling a 1" hole to place bulb. Includes 15 ft of cable and instructions. Available in ■■ red/red, ■■ red/blue, ■■ red/clear, ■■ clear/clear, ■■ blue/blue, ■■ blue/clear, ■■ amber/amber or ■■ purple/purple. Specify color combination.

Specify color combination.

| | | |
|---|----------------------------|-------------|
| REQUIRES DOUBLE COURSES | #K-GR061 Clear/Clear..... | \$74.99 pr |
|  | #K-GR061 Clear/Color | \$94.99 pr |
| STROBE POWER SUPPLY | #K-GR061 Color/Color..... | \$114.99 pr |

Save \$75 on Great Lights to Mount on Your Grille or Deck

Combine a tightly focused reflector with a directional optic lens and you get warning power that's brighter than the PAR-36 strobe. They're lightweight and stylish with a black polycarbonate housing. Weather sealed, you can mount them on the grille, rear deck or anywhere you want. Includes 15 ft of cable, connector and mounting post. 2 1/2" H x 4 3/8" D x 7 1/2". Shatter-resistant lenses are available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify two-color combination choice.

**REQUIRES
DOUBLE
C-
STROBE
POWER** #K-GR004 \$149.99 pr
#K-DL048 Replacement Lens \$18.99
#K-BU072 Replacement Strobe Tube \$64.99

Whelen® strobes require TWO outlets on a power supply.
Whelen Power Supplies sold separately on pages 290-291



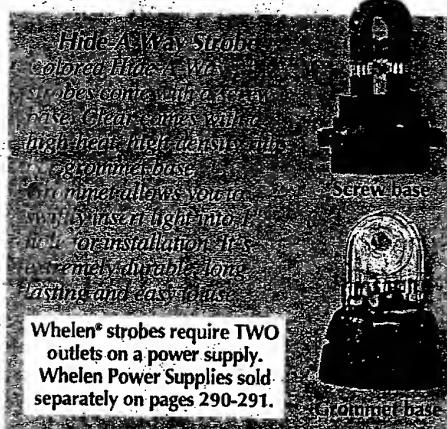
Whelen® Compact Strobe Heads Fit Between the Grille

These strobe warning lights work particularly well on recent Crown Victoria and Caprice models. Compact and low profile, the inner reflectors and fluted lenses deliver maximum light dispersion. Compact size fits most vehicles with grille slots over 2". Comes with 15 ft of cable. 2"H x 4 3/4"W x 3 1/2"D. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green.

Specify two-color combination choice.

| | |
|--|---|
| REQUIRES DOUBLE C-CELL  STROBE POWER | #K-GR046 \$174.99 pr |
| | #K-BU094 Replacement Strobe Tube \$73.99 |
| | #K-GR057 Replacement Lens \$8.99 |

Whelen® strobes require TWO outlets on a power supply. Whelen Power Supplies sold separately on pages 290-291.



WHELEN



WHELEN

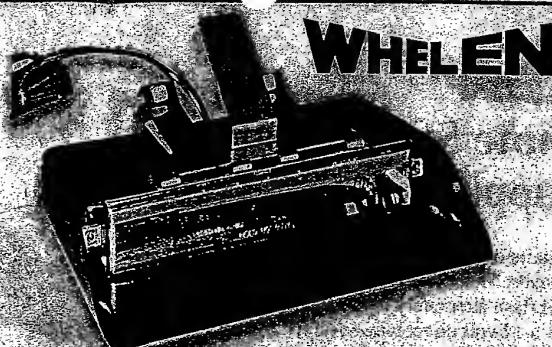


Remote Mirror Beams Mount to Your Side Mirrors

You get ultra wide angle light dispersion for proper warning at intersections. They also profile your car's width at night. The placement of these strobe lights makes them less affected by snow and mud than grille/bumper mounted lighting. Installation is as simple as replacing the existing "glamour caps" on any '95-'02 Crown Victoria, Explorer w/manual mirrors, '95-'01 Expedition, '98-'99 Tahoe and Suburban or '98-'01 Lumina with manual mirrors. And since these strobe heads mount outside your vehicle, they reduce interior clutter. Comes with 15 ft of three-conductor-shielded cable. Sold in pairs (left and right). Available in ■ red, ■ blue, ■ amber, ■ clear or ■ green. Specify lens colors.

**REQUIRES
DOUBLE
OUTLET** #K-GR084.....\$209.99 pr
#K-GR094 Replacement Lens.....\$8.99

Whelen® strobes require TWO outlets on a power supply.



Single Strobe Dash-King™ Mounts on Dash or Deck

Scoop-style™ housing prevents flashback from your windshield making these lights perfect for windshield, dash or deck mounting. Wide angle linear strobe tube with parabolic reflector offers greater light dispersion. Light heads are relampable with standard Whelen® linear flash tubes. 11½" H x 8½" W x 5½" D. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify color.

| | |
|----------------------------------|---------|
| #K-GR103 | \$89.99 |
| #K-BU131 Replacement Strobe Tube | \$61.99 |
| #K-DL090 Split Lens | \$14.99 |
| #K-GR099 Replacement Lens | \$6.99 |
| #K-DL085 Mounting Bracket | \$19.99 |

Whelen® strobes require TWO outlets on a power supply. Whelen® Power Supplies sold separately on pages 290-291.

Remote Dual Dash-King™ for Dash or Deck

The "scoop-style" housing prevents flashback from your windshield. Its wide-angle linear strobe tube with a parabolic reflector offers greater light dispersion. And the light heads are relampable 3½" H x 8½" W x 5½" D. Draws 4 amps. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify color.

| | |
|-------------------------------------|----------|
| #K-GR02 | \$159.99 |
| #K-DL085 Headliner Mounting Bracket | \$19.99 |
| #K-DL090 Split Lens | \$14.99 |

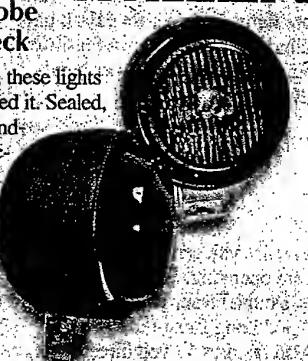
Whelen® strobes require TWO outlets on a power supply. Whelen® Power Supplies sold separately on pages 290-291.

Mount Remote Pack™ Strobe Heads in Grille or on Deck

No matter where you mount them, these lights provide warning whenever you need it. Sealed, weather-resistant head has an extended lens that gives 190° light-projection. Features an impact-resistant rubber housing, 15 ft of cable and connectors. 3/4" dia. x 2½" D. Lens made of shatter-resistant Lexan®. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify two-color combination choice.

| | |
|----------------------|-------------|
| #K-GR033 | \$134.99 pr |
| #K-BU048 Strobe Tube | \$67.99 |

Whelen® strobes require TWO outlets on a power supply. Whelen® Power Supplies sold separately on pages 290-291.



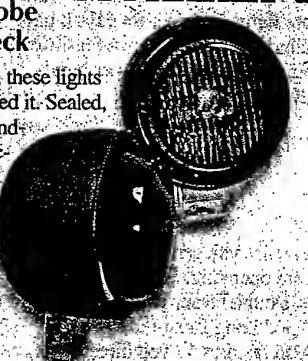
WHELEN

Low Profile Remote Dashmiser II Strobe Mounts on the Dash or Above the Rearview Mirror

Its low profile design keeps it out of your line of sight and makes it harder to spot by civilians. Use Dashmiser II as a complement to your warning lights or as your primary warning. Includes 15 ft of cable and a "Z" mounting unit for a universal fit. 4½" H x 11½" W x 5½" D. 5" clearance required between rear-view mirror and headliner. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify two-color combination choice.

| | |
|---------------------------|----------|
| #K-GR035 | \$139.99 |
| #K-CR094 Replacement Lens | \$8.99 |
| #K-BU043 Strobe Tube | \$62.99 |

Whelen® strobes require TWO outlets on a power supply. Whelen® Power Supplies sold separately on pages 290-291.



Need More Extension Cable?

Get the cable and connector you need for all remote strobe applications. Available in 10' and 15' lengths.

| | |
|------------------------------|---------|
| #K-GR114 10' Extension Cable | \$16.99 |
| #K-GR115 15' Extension Cable | \$21.99 |

CODE 3

DeckBlaster® Strobe Lights Give You Four Multi-Flash Patterns

- DeckBlaster® light heads were made just for interior mounting.
 - Internal jumper switch lets you choose from four non-synchronized patterns shown below. Once you find your favorite setting, simply leave the switch in that position.
 - Comes with built-in power supply.
 - Comes with bracket, 12V DC direct wire and Velcro®.
 - Meets SAE and Cal. Title 13 standards.
- 2½" H x 5½" W x 4½" D. Available in ■ red, ■ amber, ■ blue or □ clear. Specify any two-color combination choice.

#K-GR074 \$219.99 pr
 #K-BU079 Replacement Strobe Tube \$29.99
 #K-DL060 Replacement Lenses \$9.99



Galls Halogen Hide-A-Way Flasher Kit Has An Improved Bulb Socket

It's a perfect secondary warning device providing 2.5 alternating flashes per second for low-cost, quality performance. Kit comes complete with 50W halogen bulbs and heat-resistant color glass caps. Available in ■ red, ■ blue, ■ amber, or □ clear. Specify two color choices.

#K-GR156 \$59.99 pr

Complete Hide-A-Way Strobe System for Front or Rear Lights

Kit includes two hide-a-way strobes, one 20W weather-resistant power supply (for under-hood or in-trunk mounting) and cables. Flash patterns include CometFlash, ActionFlash, SingleFlash and Modu-Flash. Available in ■ red, ■ blue, ■ amber or □ clear. Specify color combination. See flash patterns on pages 290.

#K-GR121 Clear/Clear \$169.99 pr
#K-GR121 Clear/Color \$179.99 pr
#K-GR121 Color/Color \$194.99 pr

Rear Halogen Hide-A-Way System for Ford Crown Vics

Works on Ford 1998-2003 Crown Vics. 75 alternating FPM. Includes 50W lamps, three-term flasher, pre-cut cable lengths and 20 ft of input cable. Available in □ clear/clear.

#K-GR136 \$74.99
 #K-GR137 Halogen Hide-A-Way Replacement Bulb \$19.99
 #K-GR138 5 ft Extension Cable for #GR136 \$15.99
 #K-GR139 15 ft Extension Cable for #GR136 \$20.99

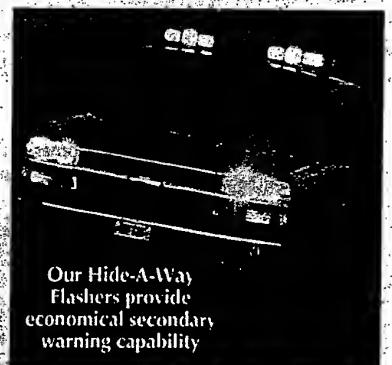


Galls Self-Contained Strobe Deck Lights Give You Three Selectable Patterns at a Great Price

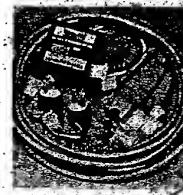
- 2,800,000 CP strobe.
- Three selectable flash patterns: DoubleFlash, QuadFlash and WarpFlash to produce 140/280/700 fpm for each light.
- Output power is 18W per light.
- Each light draws 2.3 amps.
- 12V direct wire.

Simply wire up the lights, select the pattern you want and go! Lexan® lenses available in ■ red, ■ amber, ■ blue, □ clear or ■ green. Specify color for two lenses.

#K-DL122 \$199.99 pr



Our Hide-A-Way
Flashes provide
economical secondary
warning capability

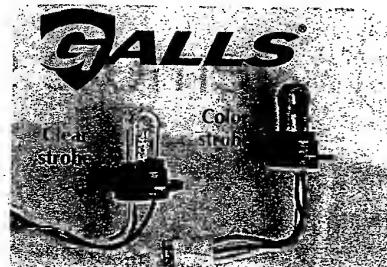


Use Galls StreetLightning™ Strobe Inserts for Undercover and Marked Vehicles

Add hidden strobes to your headlights, taillights and corner lights for extra warning. Requires drilling 1" hole in host light. Each 25W hi-intensity insert features user friendly connector plug installation. Includes 15' of cable and instructions. Each pair uses two outlets on your power supply. Available in clear/clear, blue/clear, red/clear, red/red, amber/amber, blue/blue or red/blue. Specify color combination.

| | | |
|---|--|-------------|
| <small>REQUIRES DOUBLE OUTLET</small> | #K-GR077 Clear/Clear (Compare at \$109.99) | \$79.99 pr |
| <small>STROBE POWER SUPPLY</small> | #K-GR077 Color Combo | \$109.99 pr |

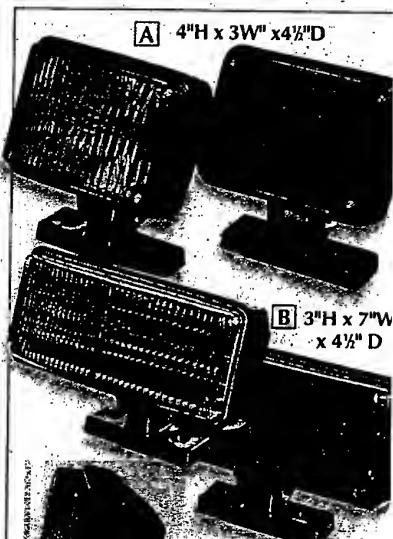
Strobes require TWO outlets on power supply.
Power Supplies sold separately on pages 290-291.



Galls Oval Strobe Lamp Kit: Ideal for Grille, Deck or Bumper Mounting

Combines high output reflectors with wide dispersion to create highly effective warning lights. Features include: long-lasting stylized, high-efficiency, high output lamps, and a rugged nylon housing with an adjustable bracket. 5 1/2" H x 7 1/2" L x 7 1/2" W. Available in your choice of red/red; red/blue or blue/blue. Specify two-color combination.

#K-GR167 \$99.99 pr



Protruding lens gives better side-warning.

Versatile Strobes Come in Two Sizes Plus Mounting Options

Available in both pedestal and stud mounts, lamps are versatile enough to be used for grille or rear deck applications. Elliptical surface lens projects light over a 180° arc for visible protection. Includes 15' of cable along with mounting options and instructions. Uses two outlets on your power supply. Both models are 4 1/2" D. Available in red, blue, amber or clear. Specify two-color combination.

(A) #K-GR100 \$139.99 pr

Replacement Strobe Tube

#K-BU155 \$47.99

(B) #K-GR108 \$149.99 pr

Replacement Strobe Tube

#K-BU157 \$41.99

Strobes require TWO outlets on a power supply. Power Supplies sold separately on pages 290-291.

Galls StreetLightning™ Par 36 Strobes with Extended Lens for Extra Visibility

The extended lens design of these strobes provide nearly 180° of light coverage. Their superior weatherproofing and impact-resistant lens and housing make these strobes a long-lasting source of warning light. Par 36 strobes are the correct height to be visible from your rear window. Made for post mounting and include a swivel bracket. Includes 15' of cable with connectors. 4" H x 4 1/2" dia. Available in red, blue, amber or clear. Specify colors for two lenses.

REQUIRES
DOUBLE
OUTLET

#K-GR101 \$99.99 pr



Strobes require TWO outlets on a power supply.
Power Supplies sold separately on pages 290-291.



Whelen® Strobe Flat Lighter™: One of Our Bestselling Visor Lights!

Produces 560 flashes per minute. Comes with two built-in adjustable mounting straps with hook and loop fasteners, a built-in on/off switch, 8 ft straight cord and cigar plug. Draws 2 amps or 13.6 volts DC. 3% H x 10% W x 1% D. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify two-color combination.

| | |
|--------------------------------|----------|
| #K-GR085 (List \$186.00)..... | \$159.99 |
| ■K-GR094 Replacement Lens..... | \$8.99 |
| ■K-GR106 Suction Cups..... | \$14.99 |



Alerte® Visor Light™: Patented Halo Lens Enhances Brightness

Produces an eye-catching alternating quad flash warning pattern at 480 flashes per minute! Includes on/off switch and Velcro® straps for quick secure mounting to visor.

| | |
|---------------------------------------|----------|
| #K-GR068..... | \$159.99 |
| ■K-GR071 Replacement Lens..... | \$5.99 |
| ■K-BU101 Replacement Strobe Tube..... | \$7.99 |

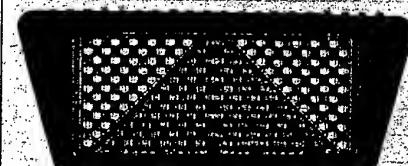


Long-Lasting LED Visor Lights

Whelen® Flatlighter

Contains a total of 160 LEDs (80 per lens) for long lasting warning. Select from 20 different flash patterns via a housing-mounted switch. Includes 8 ft DC cord with cigar plug. 4% H x 13% W x 1% D. Draws .55 amps

| | |
|------------------------|----------|
| #K-GR118 ■■■■■■■■..... | \$159.99 |
| #K-GR118 ■■■■■■■■..... | \$299.99 |
| #K-GR118 ■■■■■■■■..... | \$459.99 |

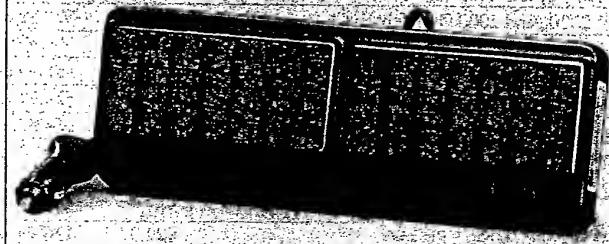


**FEDERAL SIGNAL
CORPORATION**

Federal Signal® Delta Ray Offers 12 Flash Patterns

This light has 25% more lighting surface to give you more protection than ever. Draws 1.25 amps. 11% L x 4% W x 1% D. Includes

| | |
|------------------------|----------|
| #K-GR149 ■■■■■■■■..... | \$179.99 |
| #K-GR149 ■■■■■■■■..... | \$319.99 |
| #K-GR149 ■■■■■■■■..... | \$439.99 |



Federal Signal® Basic Light

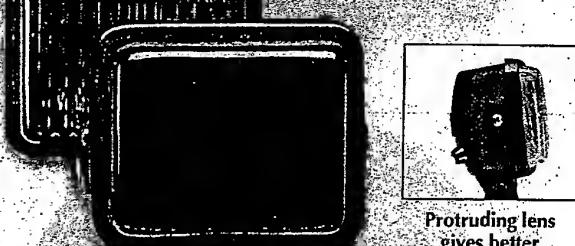
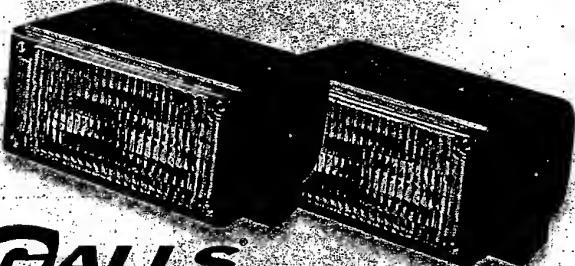
Two flash patterns. 3% H x 11% W x 1% D. Includes 10 ft DC cigar plug. Available in ■ red, ■ blue or ■■■ red/blue. Specify color. Prices vary according to color combinations.

| | |
|-------------------|----------|
| #K-GR001 ■■■..... | \$154.99 |
| #K-GR001 ■■■..... | \$159.99 |
| #K-GR001 ■■■..... | \$194.99 |

WARNING LIGHTS

Only

\$119.99


GALLS®

 Protruding lens
gives better
side-warning

GALLS®
**Galls Low Profile Remote Single
Strobe Grille/Deck Lights**

These strobes are perfect for grille and rear deck mounting, even when cramped for space. They have a sealed weatherproof extremely high temperature plastic housing and lens to stop deterioration from long-term heat exposure. They use 25W strobe tubes with polished reflectors. Includes 15' of shielded cable and quick connectors. 2 $\frac{1}{2}$ " H x 5" W x 3" D. Available in ■ red, ■ blue, ■ amber, □ clear or ■ green. Specify two-color combination.

REQUIRES DOUBLE OUTLET
 #K-GR122 \$129.99 pr
 #K-BU155 Replacement Strobe Tube \$47.99
 #K-GR157 Replacement Lens \$14.99

Strobes require TWO outlets on a power supply.
Power supplies sold separately on page 291-292.

**Galls Remote Dual Strobe Light
Mounts on Dash, Headliner or Deck**

Handy "Z" bracket and Velcro® mounting options provide placement flexibility. Low profile design is almost impossible to spot until activated when mounted in the tint area at the top of the windshield. You get two strobe heads in one housing. Includes 15' of cable to plug into any of the power supplies found on page 291. Requires two outlets on your power supply. Available in ■ red, ■ blue, ■ amber or □ clear. Specify color combination.

REQUIRES DOUBLE OUTLET
 #K-GR123 \$119.99 ea
 #K-GR157 Replacement Lens \$14.99
 #K-BU155 Replacement Strobe Tube \$47.99

Strobes require TWO outlets on a power supply.
Power supplies sold separately on page 291-292.

Galls StreetLightning™ Micro Strobes

Ideal for grille or rear deck, micro-size lightheads allow for mounting in small, tight places. Precision optics and lenses provide bright output. Durable black, ABS housing stands up to extreme environments. Includes 15' of cable, mounting post bracket and instructions. Micro is 3 $\frac{1}{4}$ " wide. Uses two outlets on your power supply. 4" H x 3 $\frac{1}{4}$ " W x 2 $\frac{1}{4}$ " D. Available in ■ red, ■ blue, ■ amber or □ clear. Specify two-color combination.

REQUIRES DOUBLE OUTLET
 #K-GR078 \$109.99 pr
 #K-BU103 Replacement Strobe Tube \$39.99
 #K-CR073 Replacement Lens \$7.99

Strobes require TWO outlets on a power supply.
Power supplies sold separately on page 291-292.

 Only
\$119.99
GALLS®

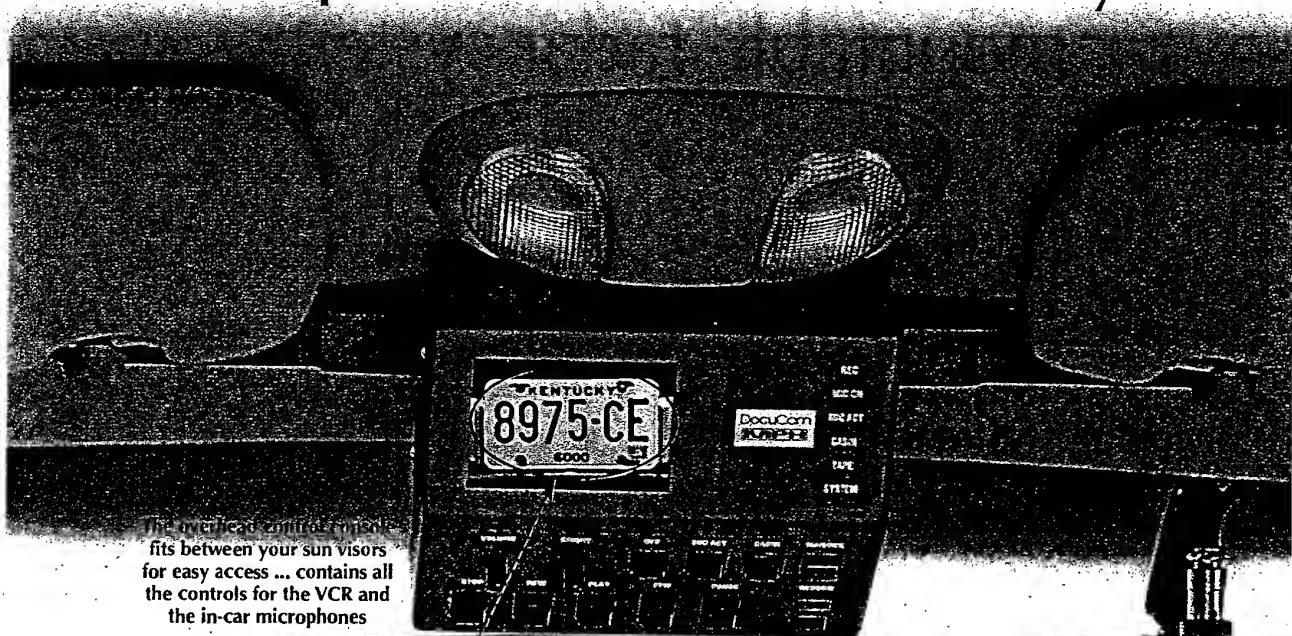
**Galls Oval Lightheads:
Thin Enough to Mount Anywhere**

Oval Strobe Lightheads are unique in size and warning power. Their low height allows the lens surface to be visible through most vehicle grilles while giving an uninterrupted visual warning signal. Lights are housed in black metal. Slotted "U" bracket makes mounting easy. Brackets and 15' shielded strobe cables with connectors are included. Each pair requires two outlets on power supply. One year FREE warranty included. 2 $\frac{1}{4}$ " H x 6" W x 1 $\frac{1}{4}$ " D. 1 lb. Available in ■ red, ■ blue, ■ amber or □ clear. Specify two-color combination.

REQUIRES DOUBLE OUTLET
 #K-GR168 \$119.99 pr
 #K-BU155 Replacement Strobe Tube \$47.99
 #K-GR157 Replacement Lens \$14.99

Strobes require TWO outlets on a power supply.
Power supplies sold separately on page 291-292.

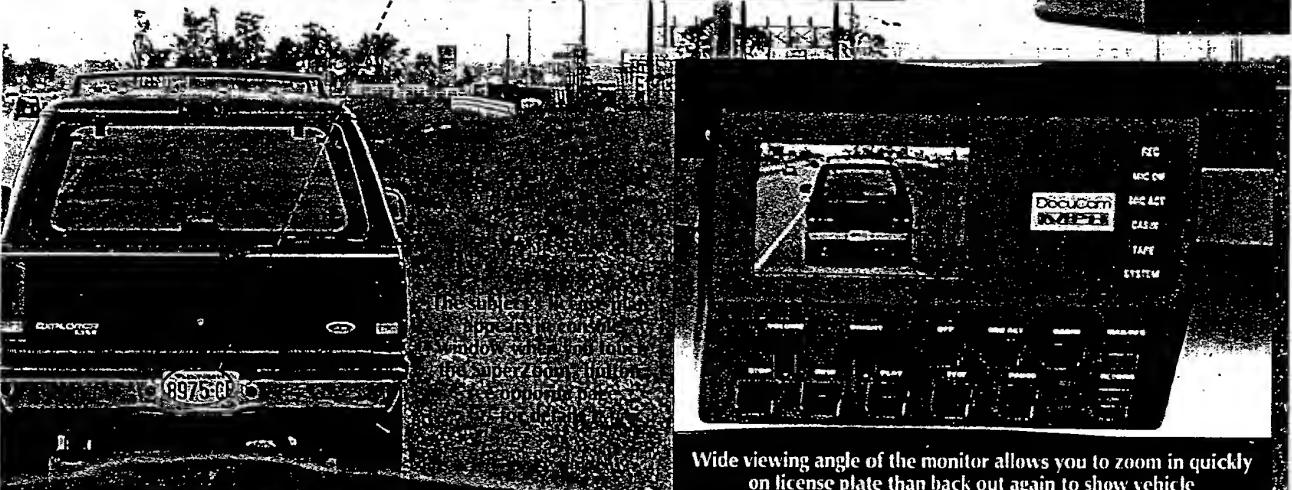
A top notch mobile video system



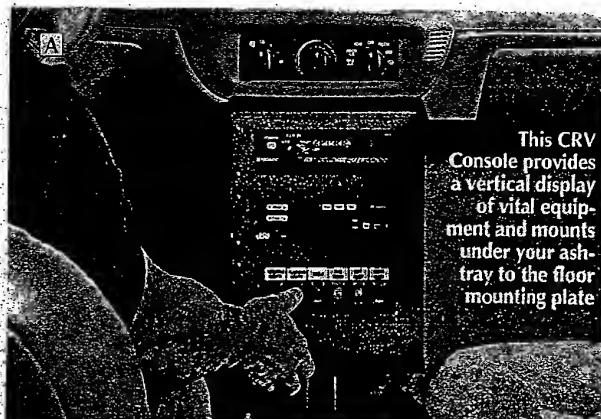
The over-the-top monitor fits between your sun visors for easy access ... contains all the controls for the VCR and the in-car microphones



FOCUS AUTO ZOOM
IN FOCUS SUPER ZOOM
OUT ZOOM



Wide viewing angle of the monitor allows you to zoom in quickly on license plate than back out again to show vehicle



Galls has Contour Consoles in a variety of vehicle makes!

JOTTO DESK®

Whether you drive a Crown Vic, Impala, or Explorer, we've got the mounting solution for your vehicle! They provide easier access to controls so that you keep your eyes on the road.

(A) & (B) Vertical Consoles for '97-'03 Crown Victorias —

Excellent for administrative, unmarked or marked patrol vehicles.

- Available in 10½"W model (for either bucket or bench seats); and 12"W model (bucket seats only)
- Mounting platform for three-piece computers (not shown)
- 16 gauge cold rolled powder-coated steel provides great durability
- Airbag compliant frees up room between seats

Install time is 30 minutes. Both consoles are 14"H x 8¾"D. 9½ lbs with face plates. Specify face plate width and either bucket or bench seat.

(C) Horizontal Console for '00-'03 Impala — Sturdy console is the perfect no holes mounting solution for your Chevy cruiser!

- Mounts under ash tray dash structure
- Glance over viewing so you can keep your eyes on the road
- Compatible with or without a computer mount
- Vertical display of vital equipment
- Mounting platform for three-piece computers
- Black powder-coated finish

• Air bag compliant frees up room between seats
Install time is 15-30 minutes. 15"H x 8¾"W x 19"D. 14 lbs with face plates.

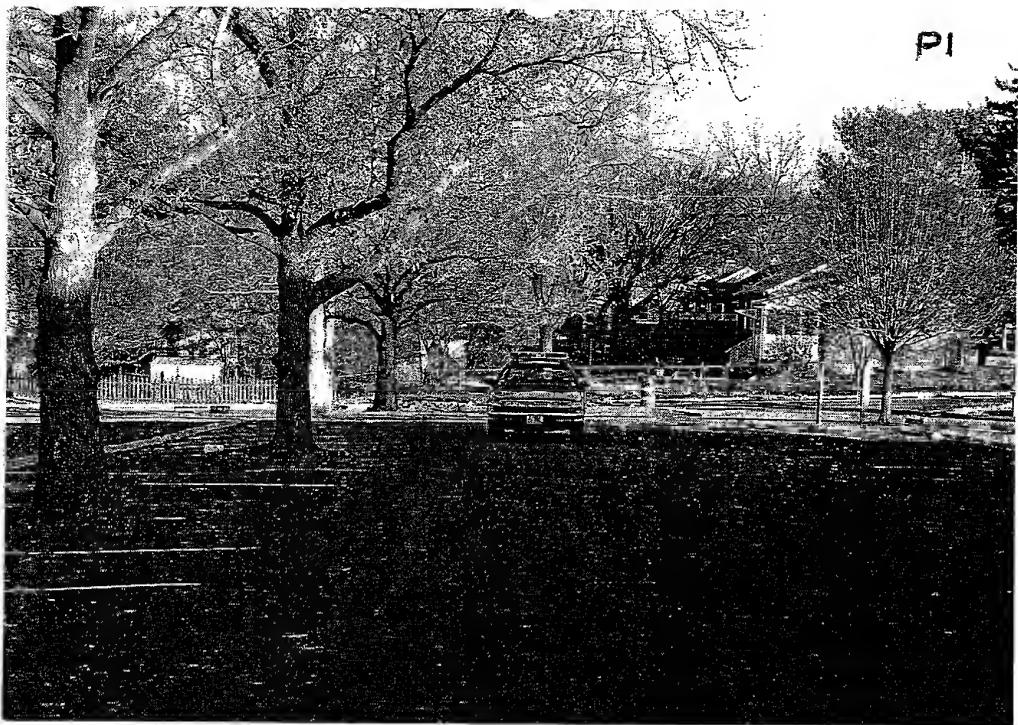
(D) Vertical Console for '02-'03 Ford Explorer — Just remove the six socket head screws, place and align this console over existing holes and replace screws to install!

- 5° slope design allows for easier viewing
- Replaces top half of Ford Explorer console
- Makes use of previous mounting hardware with no alterations
- Mounts up to five pieces of equipment (four face plates included)
- Works with dash computer mount or our no holes computer mount
- Durable 16 gauge rolled steel

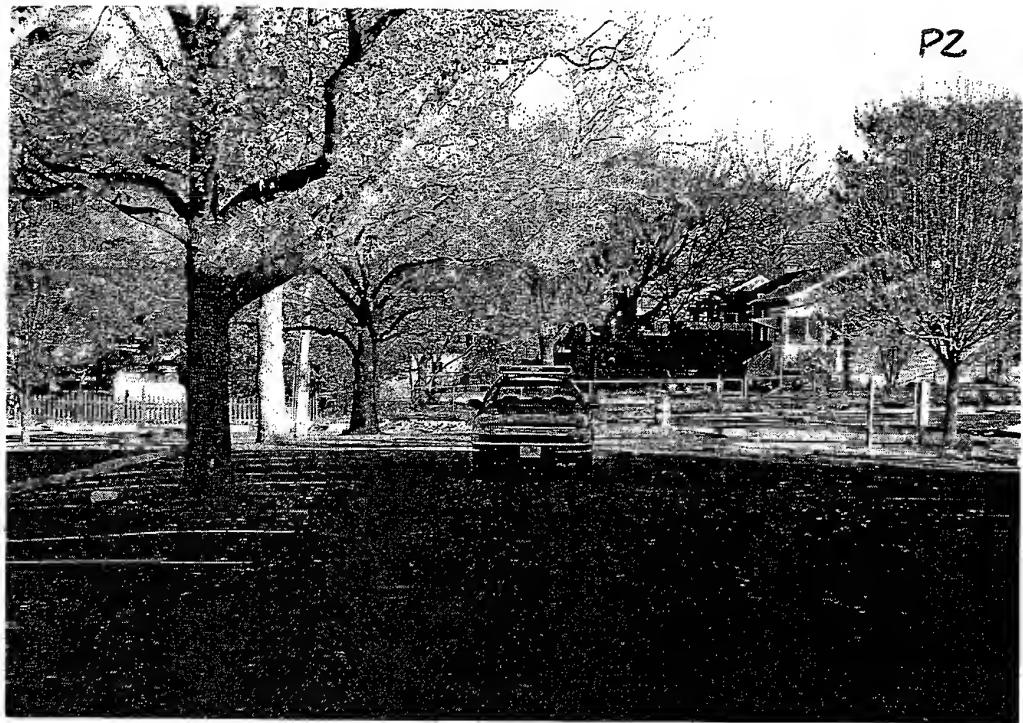
Install time is 15-30 minutes. 6 lbs without face plates and 12 lbs with face plates. 6"H x 20"L x 9¾"W.

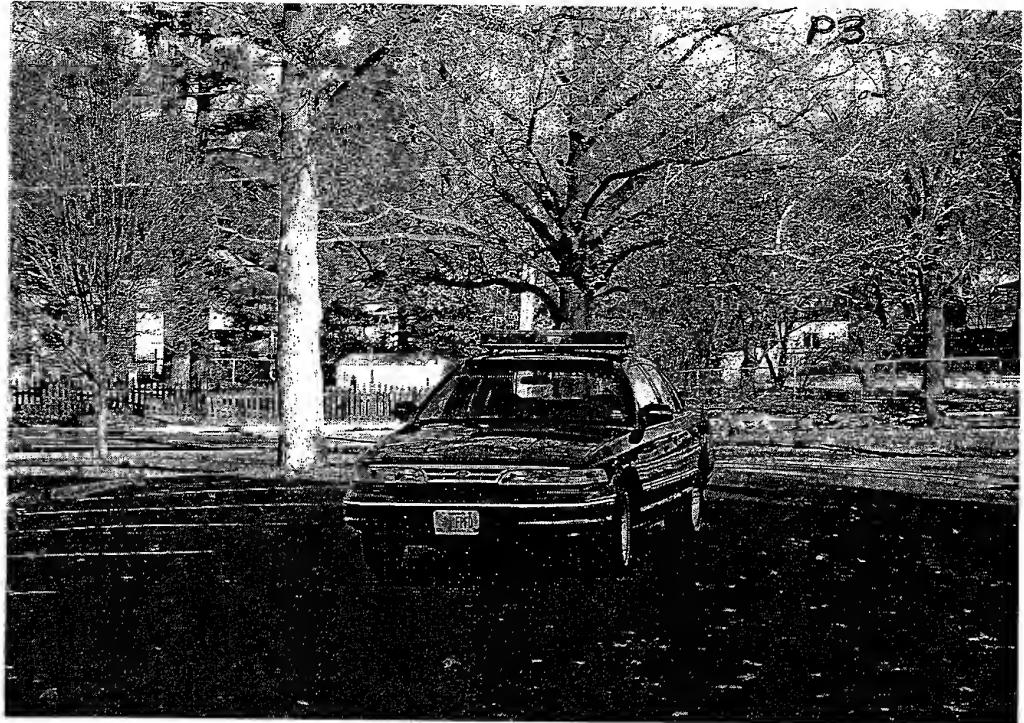
| | Item | Fits Vehicle Make | Price |
|----------------|--------------|---------------------|----------|
| NO HOLES MOUNT | (A) #K-VE156 | Crown Vic | \$299.99 |
| | (B) #K-VE150 | CRV/Climate Control | \$299.99 |
| | (C) #K-VE151 | Chevrolet Impala | \$299.99 |
| | (D) #K-VE155 | Ford Explorer | \$199.99 |

P1

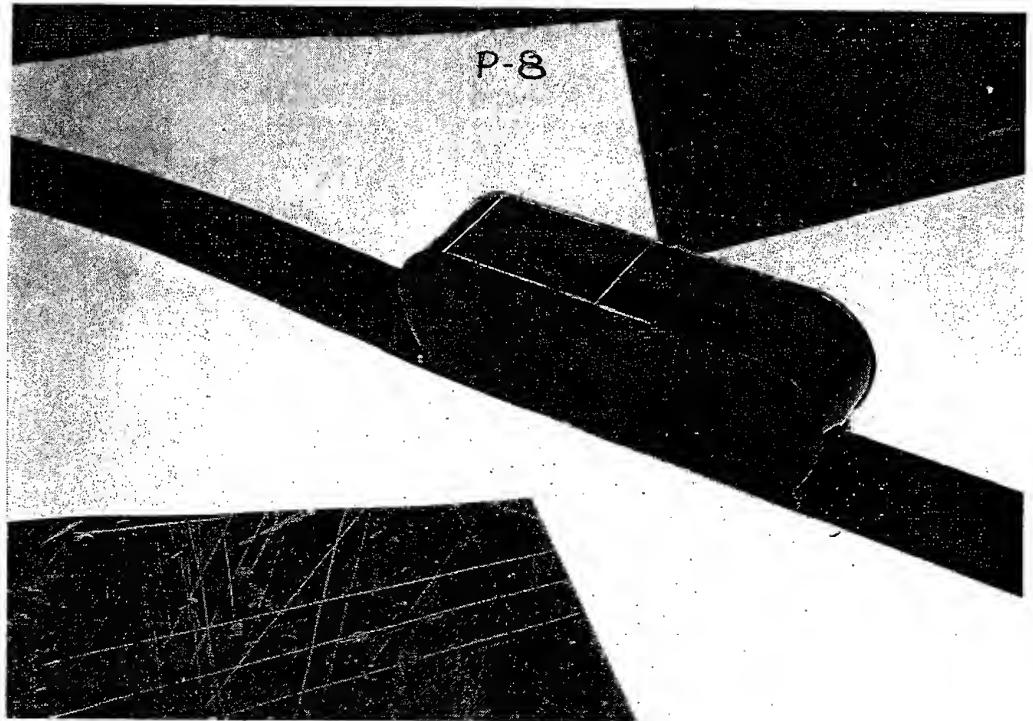
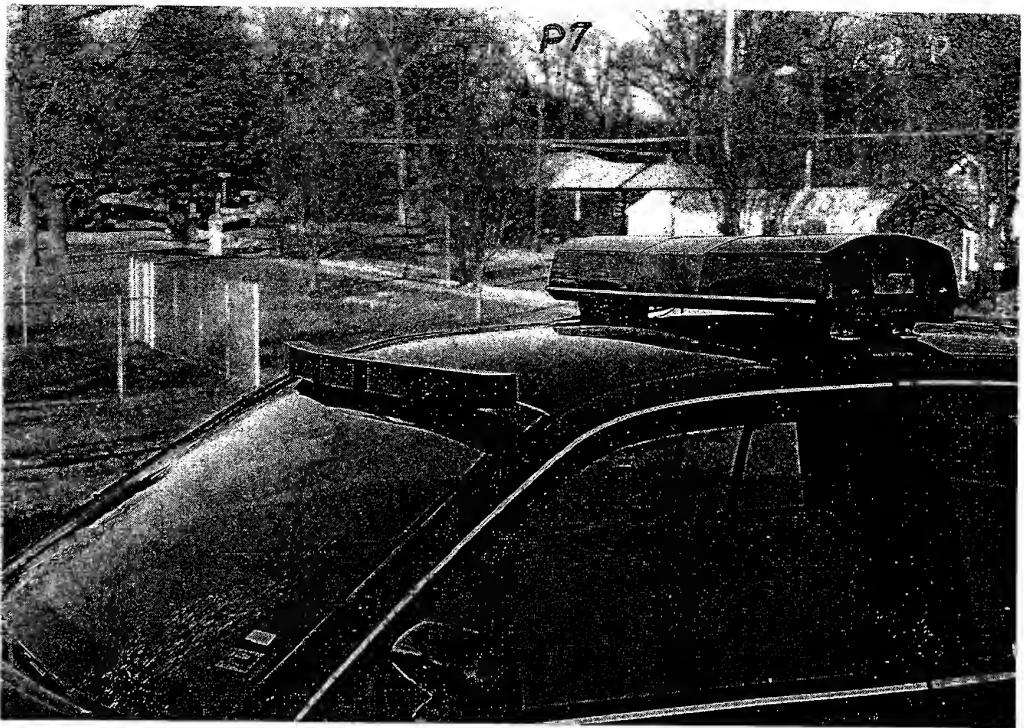


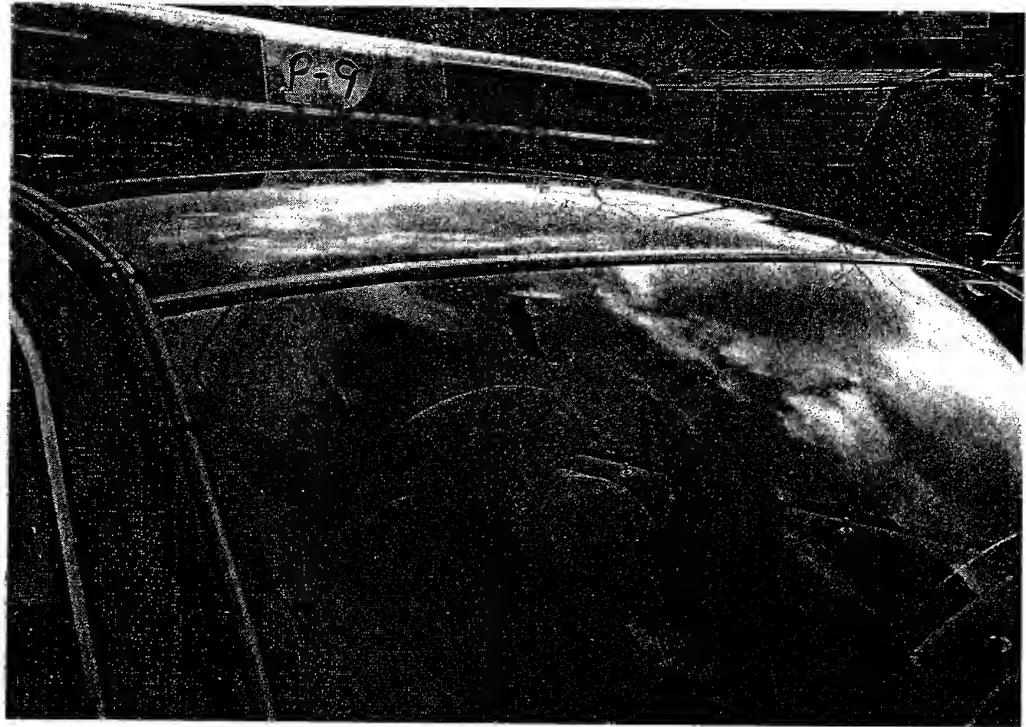
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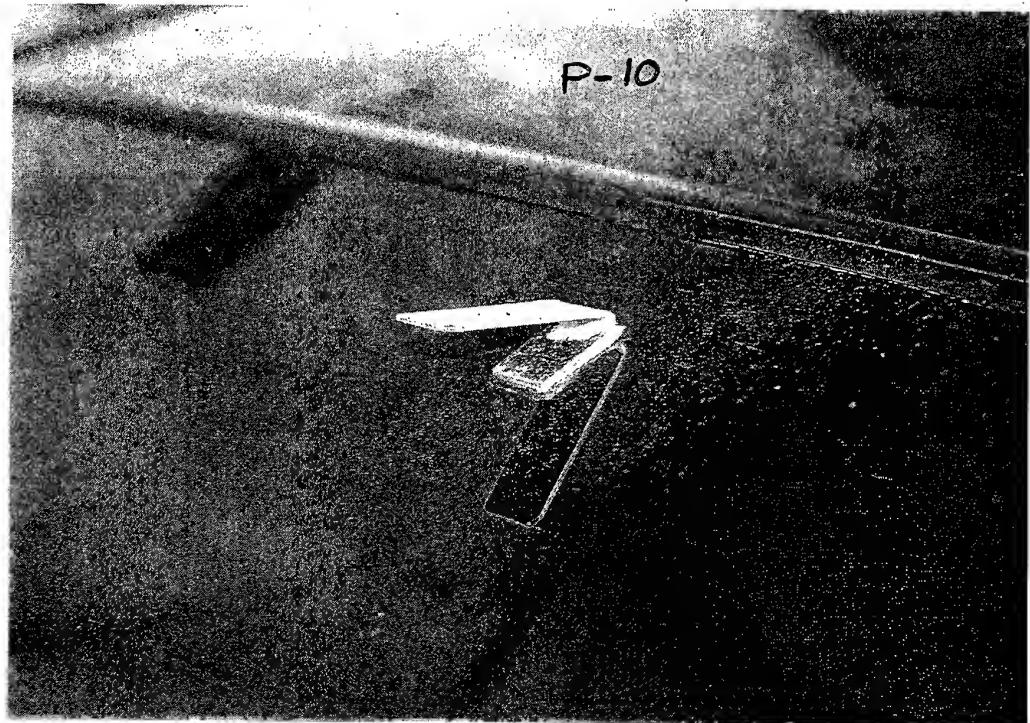






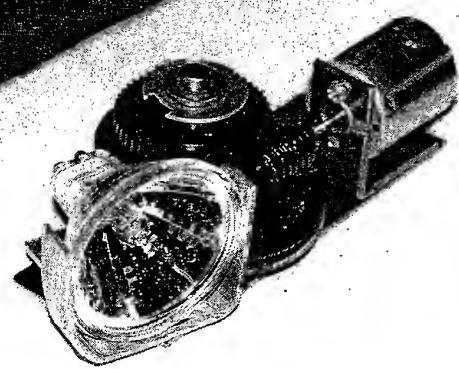


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